AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph [0005] on page 3 of the specification as follows.

[0005] In one exemplary embodiment of the method, the erasure decoding thresholds, which are used to detect Ack, Nack or erasure, have been optimized for throughput performance. In an exemplary embodiment, at least one threshold is derived based on the affect on data throughput for at least one possible type of error in detecting a state of the received ACK/NACK feedback information. For example, one possible type of error is missed detection of a NACK. In this example, the affect is represented as a cost of an average number of total bits to be retransmitted if a NACK is missed in detection. In another exemplary embodiment, the at least one threshold is derived based on the affect effect on data throughput if the state of the received ACK/NACK feedback information is correctly detected.

Please amend the paragraph [0015] on page 8 of the specification as follows.

[0015] The definition of throughput for a HARQ operation in equation (1) does not capture the penalty of the missed detection of a negative acknowledgment. As discussed in the Background, the purpose of erasure decoding is to minimize the probability of this missed detection and to minimize the detection error caused by the probability of no Ack/Nack being sent. If the probability of the erasure is high, based on the set thresholds, the probability of error in the Ack/Nack field is small. Since an erased Ack/Nack bit has the result of retransmission, the high erasure probability also has a high cost in terms of throughput. Thus, this cost needs to be incorporated in the data throughput analysis. To accomplish this, an objective function, referred to herein as a risk function, of a HARQ operation that accounts for the affects effects of missed

detection of a negative acknowledgement is provided as follows,

$$R = C_f N_f P_{missed = \text{det } ection} - C_c D \tag{6}$$